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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/814,097	03/22/2001	Toshiyuki Sashihara	017661/0172	2041
22428	7590	08/04/2004	EXAMINER	
FOLEY AND LARDNER SUITE 500 3000 K STREET NW WASHINGTON, DC 20007			VINCENT, DAVID ROBERT	
			ART UNIT	PAPER NUMBER
			2661	6

DATE MAILED: 08/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/814,097

Applicant(s)

SASHIHARA, TOSHIYUKI

Examiner

David R Vincent

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. ____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>5.6</u> . | 6) <input type="checkbox"/> Other: ____. |

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Claim Objections

1. Claims 2-13 are objected to because of the following informalities: When referring the past tense the claims specify the phrase "the send data" . This should be changed to "the sent data". Appropriate correction is required.

Note

The copy of the specification and claims that is in the application appears to be faxed copy which is barely readable. The applicant may wish to send in a better copy for purposes of scanning. All patent applications are being scanned into electronic form.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-2, 5-6 are rejected under 35 U.S.C. 102(e) as being anticipated by Trachewsky (US 2003/0206559).

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Trachewsky discloses determining stepwise (not further defined, reads on any steps or sequence of steps) priority level and priority field (Figs. 6-7, 72; sections 122, 171, 211, 212, 219, 222, 224, 229, 377, 378, 384, 448, 451, 458, 460) of collided packets (not further defined, reads on frames, collision detection, 121, 146, 151, 158, 163, 164, 170, 171, 246, 278, 346, 377, 378, 384, 448, 451, 458, 460), resending based on priority level, (see priority sections and detecting collision implies resending; section 171 states "generally" collisions are at the same priority level which means sometimes they are not), generating random number (e.g., sections 451, 458, 460), judging priority levels (reading priority level in frame header and selecting time slot, see above), and generating delay time (inherent delay in resending and reading priority and determining backoff time and counters, e.g., section 171), as specified in claims 1-2, 5-6.

Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 2, 5-7, 12-13 are rejected under 35 U.S.C. 102(b) as being anticipated by JP S59-204347, H5-128059, or S59-91527.

The admitted prior art discloses the detecting of collisions, using random times, delay values, judging

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priorities, priority fields, as specified in claims 1-2, 5-7, 12-13, (see abstracts, sections of patents, and discloses IDS #5, filed 7/24/03, pg. 3.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 3-4, 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP S59-204347, H5-128059, or S59-91527, as set forth above, in view of H10-229405.

However, the references JP S59-204347, H5-128059, or S59-91527 fail to particularly call for using the hop counts.

H10-229405 teaches priority levels based on hop counts (paragraph 54).

It would have been obvious to combine using hop count system of H10-229405 with the systems that use collision detection and priority levels by modifying the priority level generation algorithm. By doing so would help determine whether the frames or packets have already traveled a far distance or

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have just started their journey to their destination. Packets that have been traveling a longer amount of time could get a higher priority level, especially if they carry real time data.

Claim Rejections - 35 USC § 103

7. Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP S59-204347, H5-128059, or S59-91527 as set forth above, in view of H11-234286.

However, the references JP S59-204347, H5-128059, or S59-91527 fail to particularly call for details of IP packet fragments and the inherent details of complying with Ethernet or TCP maximum segment size (MSS) rules.

H11-234286 teaches using fragments and setting priority according to length (paragraph 7).

When using TCP the protocol involves determining a MSS and each router also determines if it can process a TCP/IP packet/segment of the present size. When the files are broken into smaller segments or fragments the packets include an indication of if the present packet is the last one in the stream. This is done e.g., because the sender must store the entire file that was broken up until it receives notification that all pieces were received free of error. Doing this merely amounts to complying with the protocols.

Claim Rejections - 35 USC § 103

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8. Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Trachewsky (US 2003/0206559), as set forth above, in view of H11-234286.

However, although Trachewsky discloses using TCP/IP (e.g., Fig. 2; sections 140, 175, 212, 357, 361, 382, 396, 451) , fragments (e.g., section 166) Trachewsky fails to particularly call for details of IP packet fragments and the inherent details of complying with Ethernet or TCP maximum segment size (MSS) rules.

H11-234286 teaches using fragments and setting priority according to length (paragraph 7).

When using TCP the protocol involves determining a MSS and each router also determines if it can process a TCP/IP packet/segment of the present size. When the files are broken into smaller segments or fragments the packets include an indication of if the present packet is the last one in the stream. This is done e.g., because the sender must store the entire file that was broken up until it receives notification that all pieces were received free of error. Doing this merely amounts to complying with the protocols.

Claim Rejections - 35 USC § 103

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Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Trachewsky (US 2003/0206559), as set forth above, in view of Gollnick (US 2004/0073933).

Although Trachewsky disclose using modulation (e.g., Fig. 5), Trachewsky fails to particularly call for a radio system.

Gollnick discloses using collision detection and backoff (sections 213-214, 330) with a radio system (e.g., Figs. 8-12).


It would have been obvious to take the modulated data in Trachewsky and send it over a radio system so that both wired and wireless users could transmit data.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David R Vincent whose telephone number is 703 305 4957. The examiner can normally be reached on M-TH.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas Olms can be reached on 703 305 4703. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


David R Vincent
Primary Examiner
Art Unit 2661

July 29, 2004